

CLAIMS

1. A seal comprising a sealing means (34) which is
5 applicable in a mounting (32) and intended for a lid (16)
of an isostatic press (10), said lid having a first posi-
tion in which it closes a pressure chamber of the iso-
static press and a second position in which it is sepa-
rated from the pressure chamber, the sealing means being
10 applicable in the mounting so that, in said first posi-
tion, it seals between the lid and a pressure chamber
wall (14),

c h a r a c t e r i s e d

in that the sealing means comprises at least two
15 individual circular-arc-shaped segments (36, 76a-b,
78a-e) which together form a closed ring when they are
placed in the mounting, and

by a stop arrangement (60, 62, 64, 92a-c, 94a-d,
96a-b, 98a, 100, 102, 110, 112, 114, 116, 118) arranged
20 to limit movements of the segments so that these segments
are kept in the mounting also in said second position.

2. A seal as claimed in claim 1, wherein at least
one part of said stop arrangement is detachably arranged
25 on the segments.

3. A seal as claimed in claim 1 or 2, wherein said
stop arrangement comprises a set of stop elements (60,
92a-c, 110, 114, 116, 118), the movement of each segment
30 being limited by at least one stop element, each stop
element limiting only the movement of one segment.

4. A seal as claimed in claim 3, wherein each stop
element is arrangeable
35 so as to extend between a mounting forming portion
and a segment, and

so as to be movably arranged relative to the segment, but fixedly arranged relative to the mounting forming portion or vice versa.

5 5. A seal as claimed in claim 4, wherein the stop element (92a, 94a-c), such a screw, bolt or pin, is fixedly arrangeable in said mounting forming portion and has a stop portion extending into a recess (96a) in the segment, the extent of the recess in the radial direction
10 of extension of the sealing means being greater than the extent of the stop portion in said direction.

 6. A seal as claimed in any one of claims 1-5, which further comprises a spring assembly (50, 86a, 114) which
15 is arranged to actuate the segments, each segment, when placed in the mounting, being subjected to a force directed outwards in the radial direction of extension of the sealing means.

20 7. A seal as claimed in claim 6, wherein said spring assembly comprises a set of individual springs (50, 86a, 114), each segment being actuated by at least one spring, each spring actuating one segment only.

25 8. A seal as claimed in claim 7, wherein each segment comprises a plurality of cavities (52, 84a), each cavity being adapted to receive a spring which is adapted to extend, in the radial direction of extension of the sealing means, from a mounting forming portion into the
30 cavity.

 9. A seal as claimed in claim 8, wherein each spring is loosely arranged without being fixed in said cavity.

35

 10. A seal as claimed in any one of claims 1-9, wherein each segment has, at both ends, a projecting

portion (38, 40) which, with the segments placed in the mounting, overlaps a corresponding projecting portion of an adjoining segment.

5 11. A seal as claimed in any one of claims 1-10, wherein said mounting comprises a circular groove (32) in a seal holder (30) belonging to the lid.

10 12. A method for sealing a lid (16) adapted to close a pressure chamber of an isostatic press (10), comprising using as a seal a set of individual circular-arc-shaped segments (36, 76a-b, 78a-e),

 placing each segment in a mounting (32) belonging to the lid, so that the segments together form a closed ring
15 and seal between the lid and a pressure chamber wall (14) when the lid closes the pressure chamber, and

 locking each segment so that its mobility in the radial direction of extension of the lid is limited, and so that the segments are kept in the mounting also when
20 the lid is removed from the pressure chamber.

 13. A method as claimed in claim 12, which further comprises actuating each segment by a spring force (50, 86a, 114) directed outwards in the radial direction of
25 extension of the lid, so that the radial position of the segments is adjusted to the expansion of the pressure chamber during a press operation.

 14. A method as claimed in claim 12 or 13, in which
30 the seal is established by placing and locking one segment at a time.

 15. An isostatic press, comprising a pressure chamber, a lid for closing the pressure chamber and a seal
35 as claimed in any one of claims 1-11.

21

16. A lid adapted to close a pressure chamber of an isostatic press, which lid comprises a seal as claimed in any one of claims 1-11.

5 17. A seal holder adapted to be arranged on a lid for closing a pressure chamber of an isostatic press, said seal holder comprising a seal and a mounting as claimed in any one of claims 1-11.

10 18. Use of a seal as claimed in any one of claims 1-11 for sealing a lid for a pressure chamber of an isostatic press.